

FIG. 1

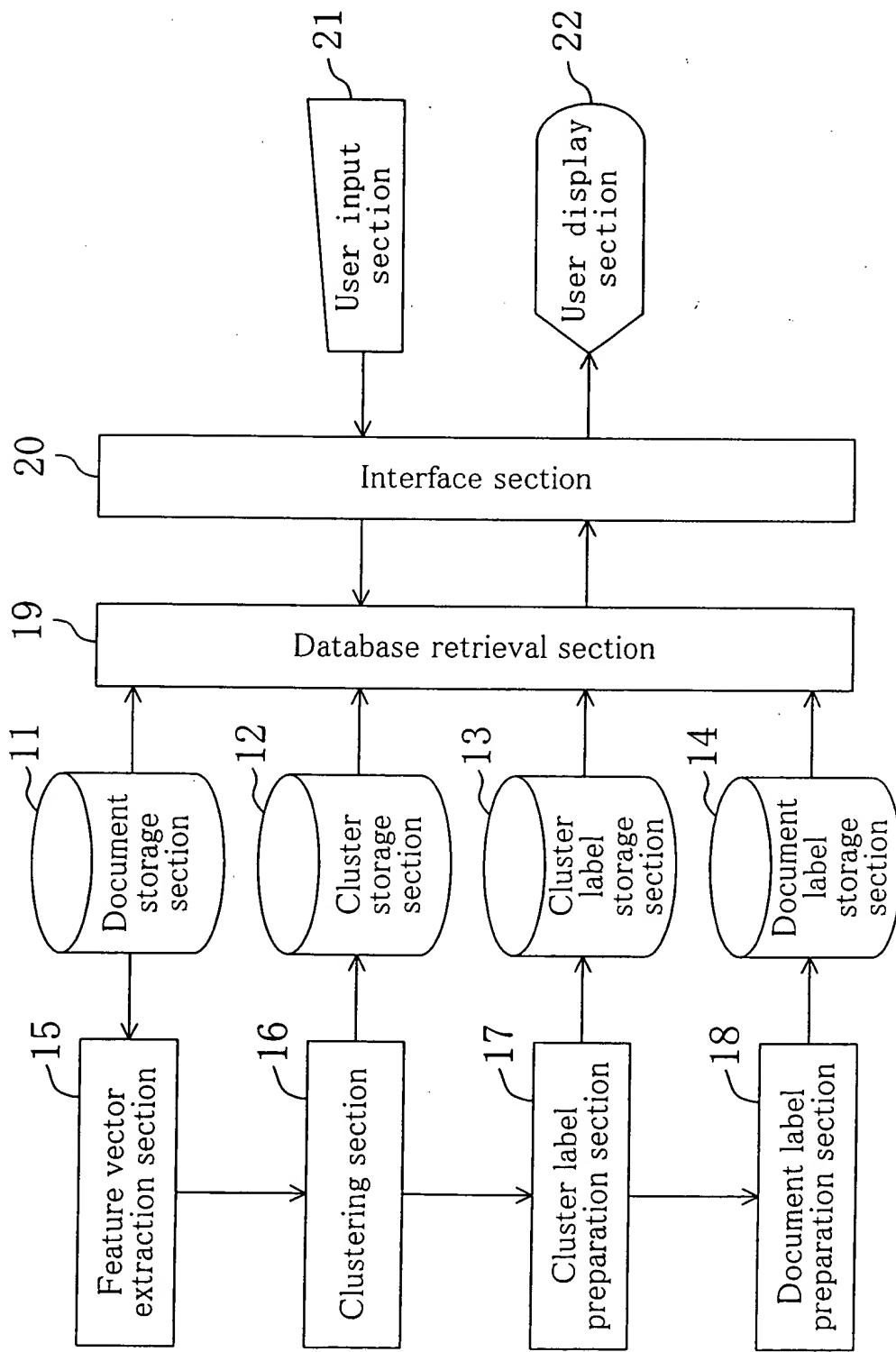


FIG. 2

Document ID	Text
1	When you cannot suppress a desire for eating some sweet stuff, (1) eat chewy one that gives the feeling of satisfaction in a predetermined amount ...
2	As a principle, do exercise alone anytime and anywhere. Different persons have different lives and physical conditions. ...
3	You are absolutely right. If you are in trouble or ...
:	: n pcs.

Document Di {

3/18

FIG. 3

Retrieved _ hits.

Cluster ID	Cluster label	Document ID	Documents
1	Confectionery, snack, cheese	1	When you cannot suppress a desire for eating some sweet stuff, (1) eat chewy one that gives the feeling of satisfaction in a predetermined amount. ...
		190	Take milk, dairy products (cheese, yogurt, etc.) for a snack ...
	Watery food (jelly, pudding, yogurt)...	432	You may freely choose a snack within 200 kcal. ... If a low-calorie snack is desired, low-calorie sweetener ...
		644	When you cannot suppress a desire for eating some sweet stuff, - eat chewy one that gives the feeling of satisfaction. ... all to fall within a total amount of 200 kcal per day ...

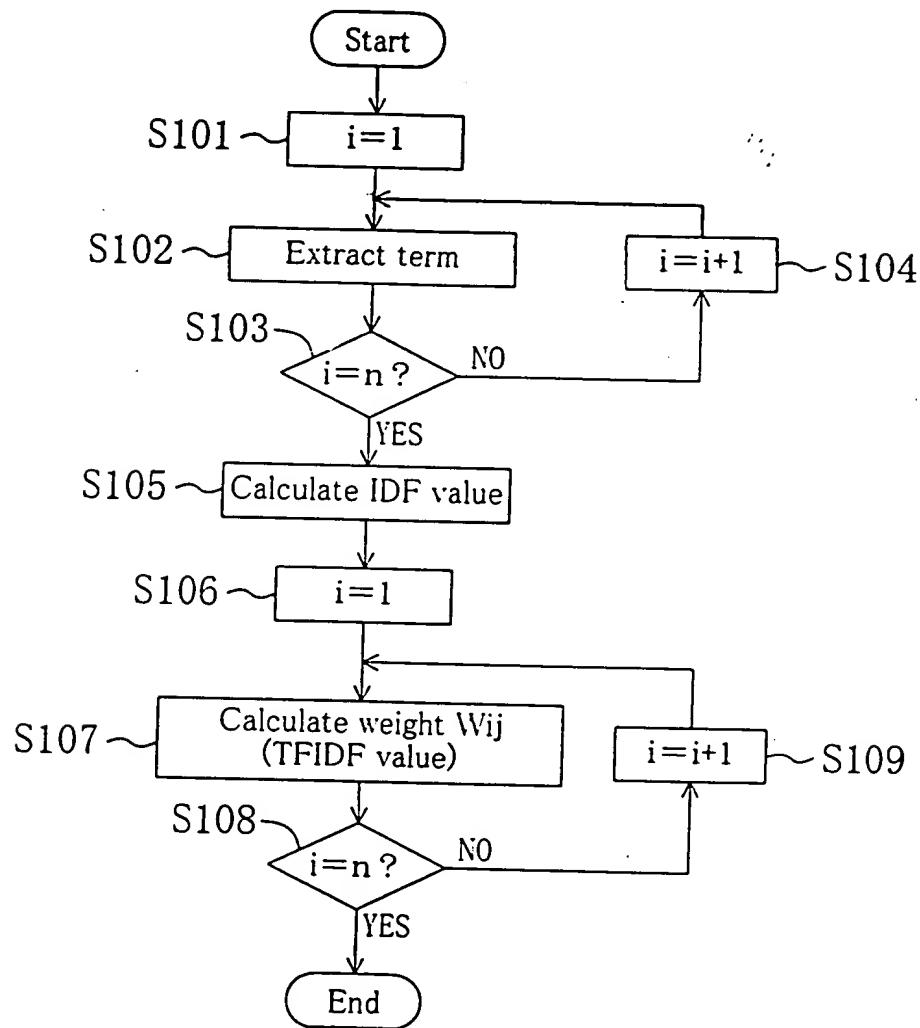
previous cluster

next cluster

4/18

FIG. 4

Extraction of document feature vector



5/18

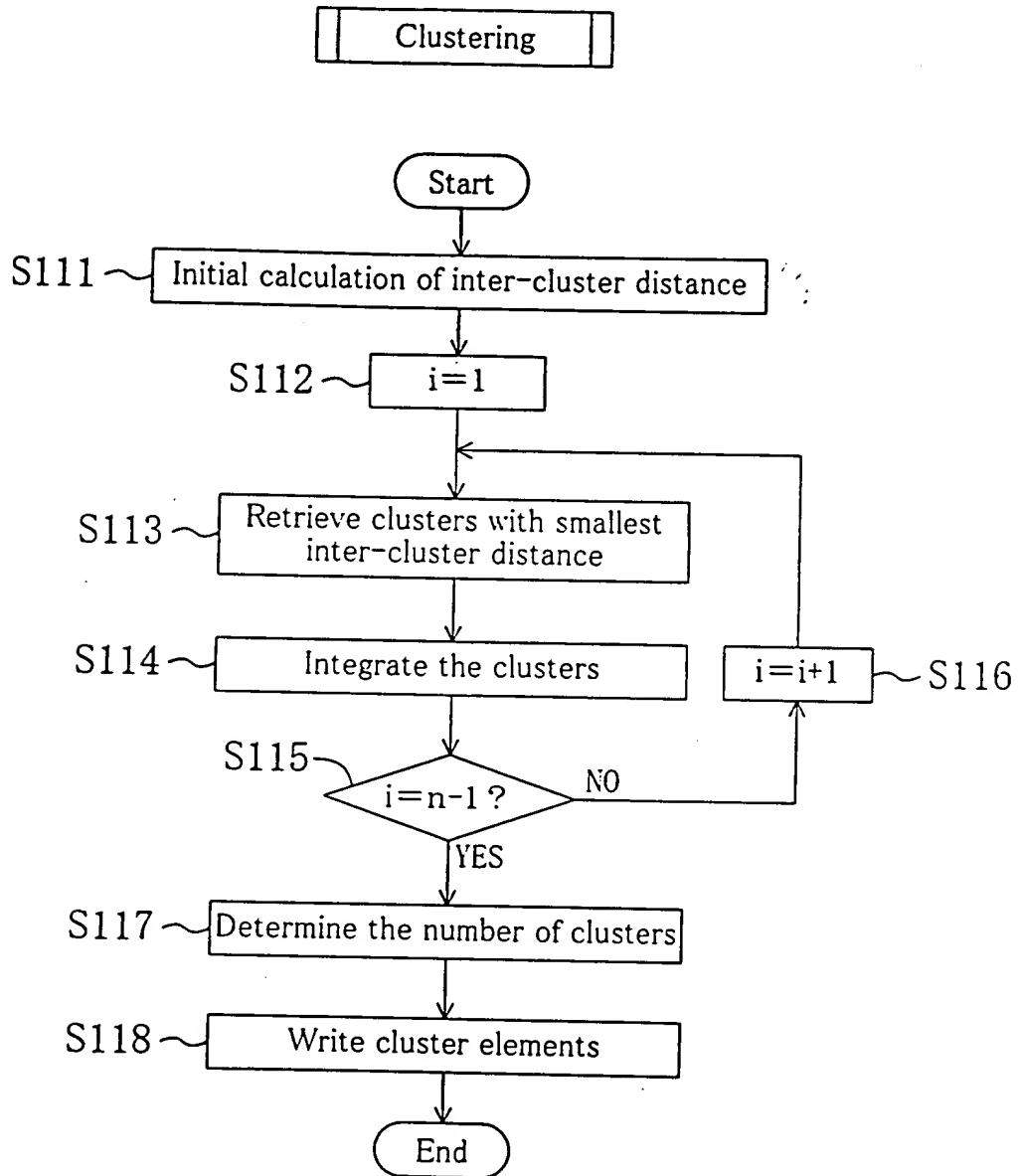
FIG. 5

Diagram illustrating a feature vector V_i for a document. The vector is represented as a list of terms and their weights, grouped by a brace labeled "Feature vector V_i ". A bracket on the right indicates the vector has n components.

Document ID	
Term T_j	Weight W_{ij}
sweet stuff	0.141
cake	0.193
sweet potato	0.223
jelly	0.230
cheese	0.173
ingest	0.084
noncaloric	0.161
pudding	0.223
beverage	0.156
nutrition	0.127
candy	0.174
eat	0.231
food	0.109
:	:

6/18

FIG. 6



Title: INFORMATION RETRIEVAL SYSTEM

Inventor: Eiichi Naito, et al.

Atty. Ref. No.: 5077-000043

ATTORNEY: GREGORY A. STOBBS, Harness, Dickey & Pierce, P.L.C.

7/18

FIG. 7

Cluster ID	Document ID
1	1, 190, 432, 644
2	2, 412, 3, 158
3	3, 158
4	4, 109, 182, 615
:	:

8/18

FIG. 8

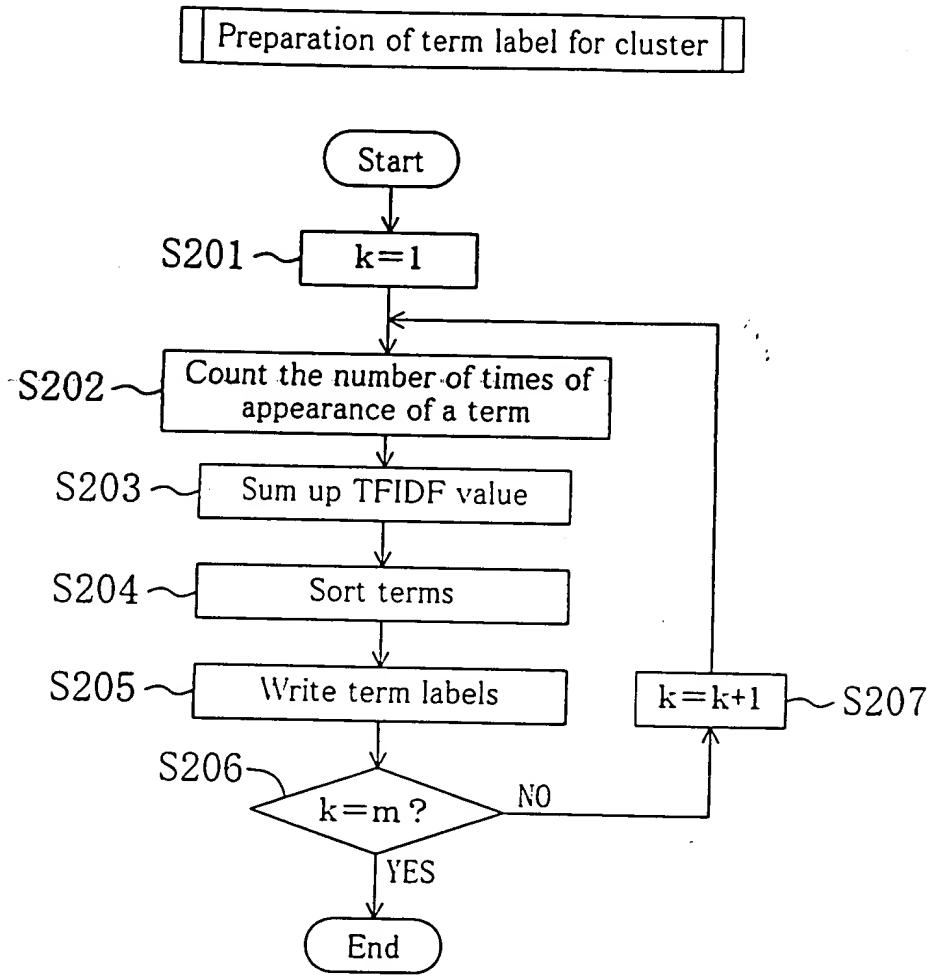
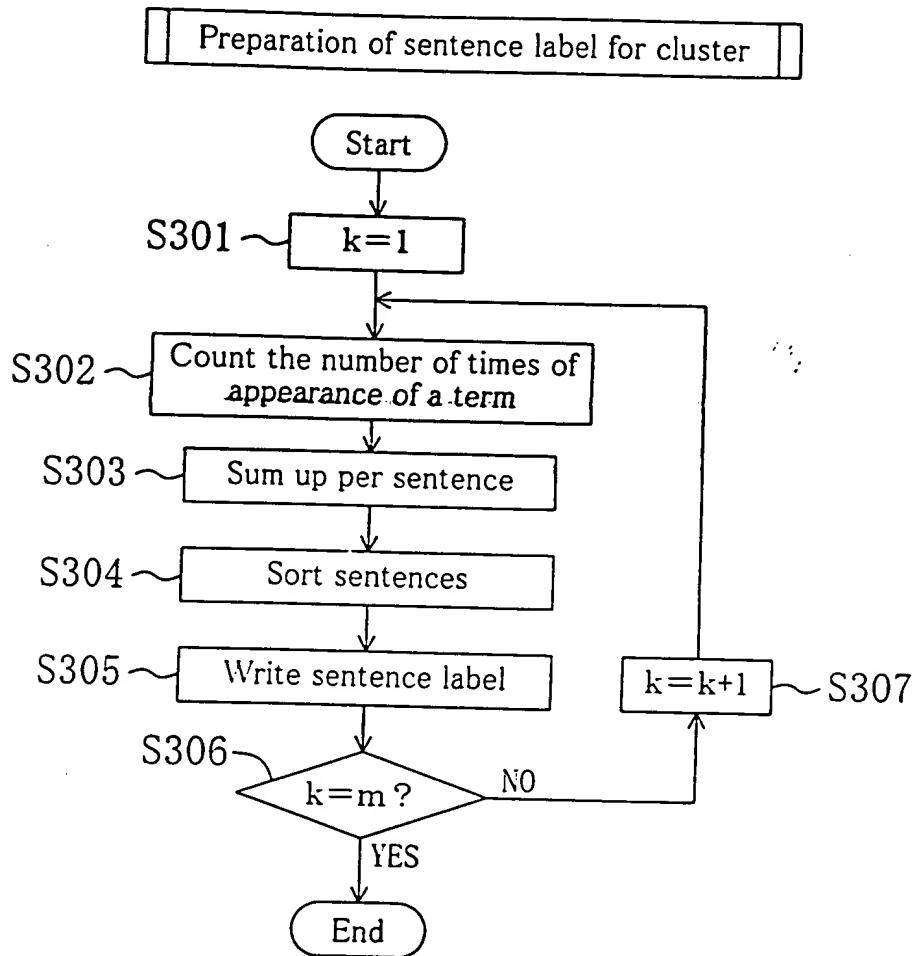


FIG. 9

Cluster ID	Term label
1	sweet stuff, snack, cheese
2	physical condition, exercise, effect
3	stress, positive thinking, status
4	menses, appetite, diet
:	:

9/18

FIG. 10



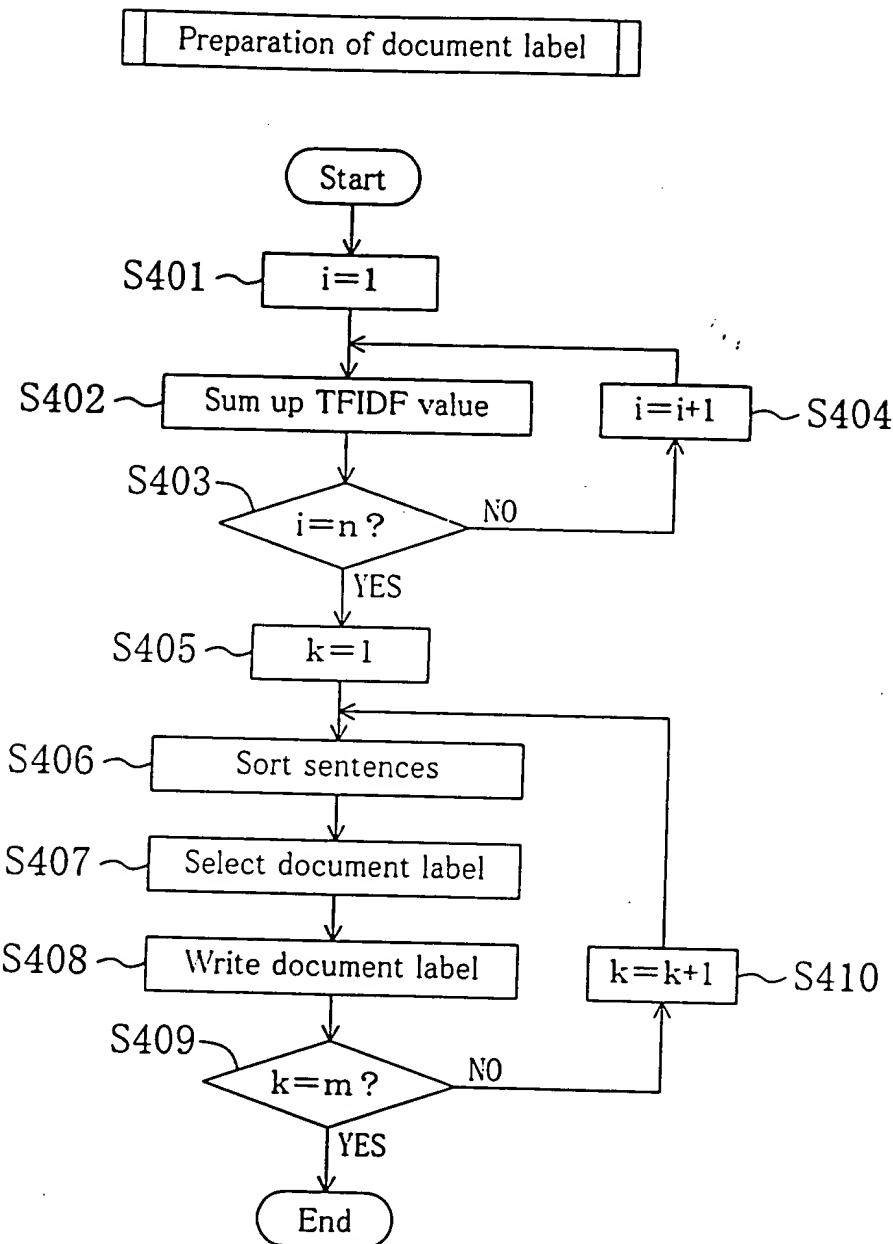
TOYOTA MOTOR CORPORATION

FIG. 11

Cluster ID	Text label
1	Watery food (jelly, pudding, yogurt)...
2	When you are in poor physical condition during your menstrual period, do not force yourself to do exercise ...
3	Clarify the cause of the stress ...
4	Not to disturb your diet pace even before your menstrual period ...
:	:

10/18

FIG. 12

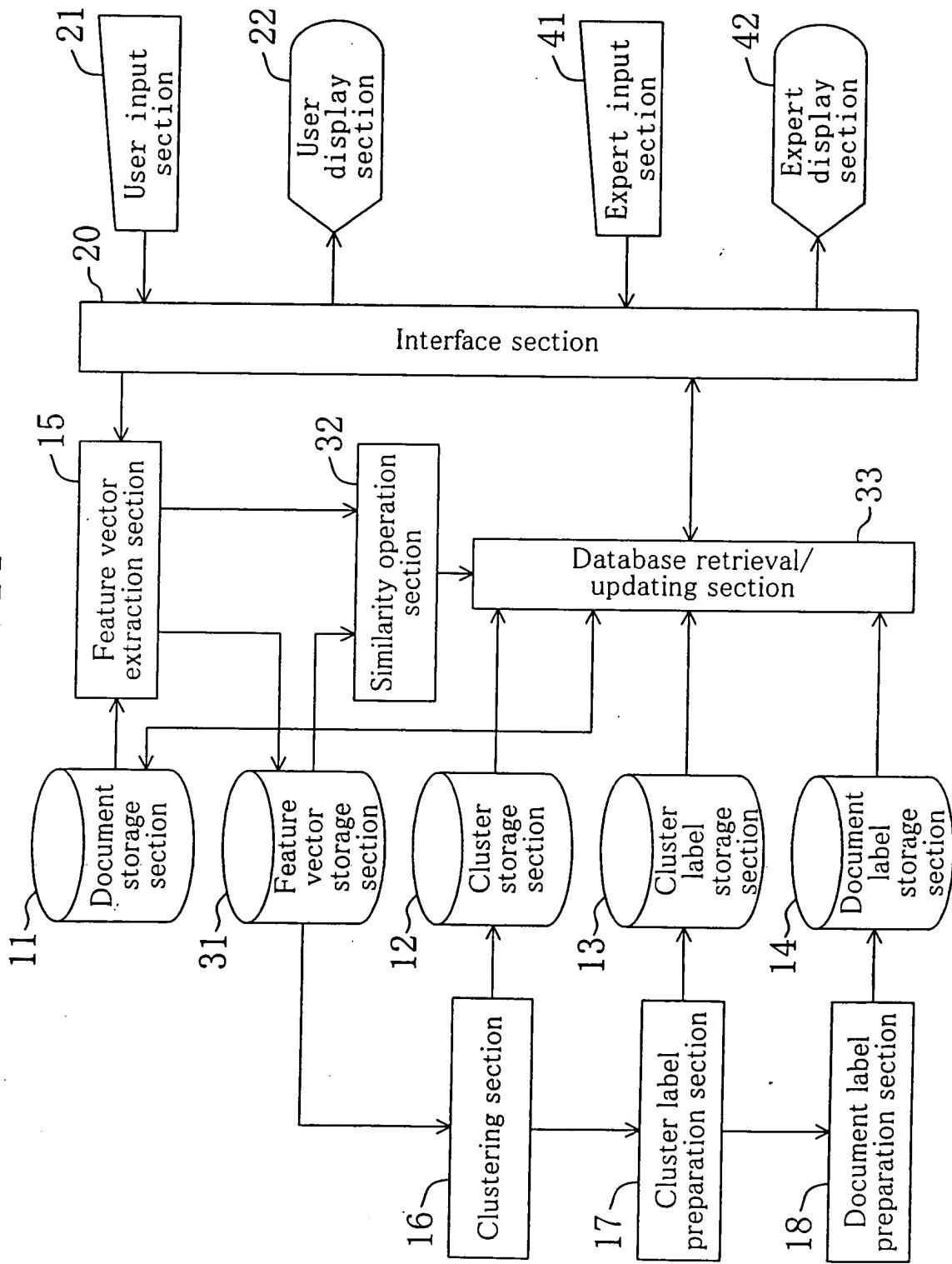


11/18

FIG. 13

Cluster ID	Document ID	Document label
1	1	eat chewy one that gives the feeling of satisfaction ...
	190	Take milk, dairy products (cheese, yogurt, etc.) for a snack ...
	432	If a low-calorie snack is desired, low-calorie sweetener ...
	644	all to fall within a total amount of 200 kcal per day ...
	:	:

FIG. 14



13/18

FIG. 15

Table of questions

Question ID	Questions	Associated document ID
1	When I cannot suppress a desire for eating some sweet stuff, what kind of stuff may I eat?	1
2	I heard early morning exercise before breakfast is most effective. How about evening aerobic exercise?	2
3	My menses is behind more than a week this month...	3
:	:	:

n pcs.

FIG. 16

List of answers

Document ID	Answers
1	When you cannot suppress a desire for eating some sweet stuff, (1) eat chewy one that gives the feeling of satisfaction in a predetermined amount ...
2	As a principle, do exercise alone anytime and anywhere. Different persons have different lives and physical conditions. ...
3	You are absolutely right. If you are in trouble or ...
:	:

m pcs.

TOP SECRET SOURCE CODE

14/18

FIG. 17

Question		Answers	
Cluster ID	Sentence label	Document ID	Documents
		1	When you cannot suppress a desire for eating some sweet stuff, (1) eat chewy one that gives the feeling of satisfaction in a predetermined amount. ...
		190	Take milk, dairy products (cheese, yogurt, etc.) for a snack...
Watery food (jelly, pudding, yogurt)...	1	432	You may freely choose a snack within 200 kcal. ... If a low-calorie snack is desired, low-calorie sweetener ...
		644	When you cannot suppress a desire for eating some sweet stuff, - eat chewy one that gives the feeling of satisfaction. ... all to fall within a total amount of 200 kcal per day ...

next cluster

previous cluster

15/18

FIG. 18

Question	Answer
When I cannot suppress a desire for eating some sweet stuff, what kind of stuff may I eat?	When you cannot suppress a desire for eating some sweet stuff, (1) eat chewy one that gives the feeling of satisfaction in a predetermined amount. ...

16/18

FIG. 19

Extraction of user question feature vector

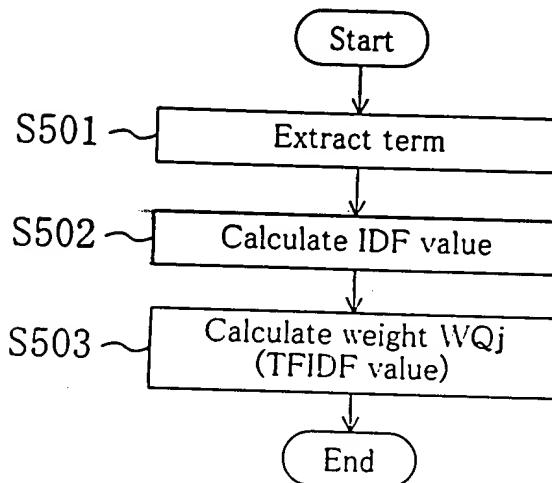


FIG. 20

Feature vector VQ {

Term T _j	Weight WQ _j
sweet stuff	0.601
snack	0.452
I	0.400
eat	0.847
breakfast	0.556
method	0.456
:	:

17/18

FIG. 21

Calculation of similarity

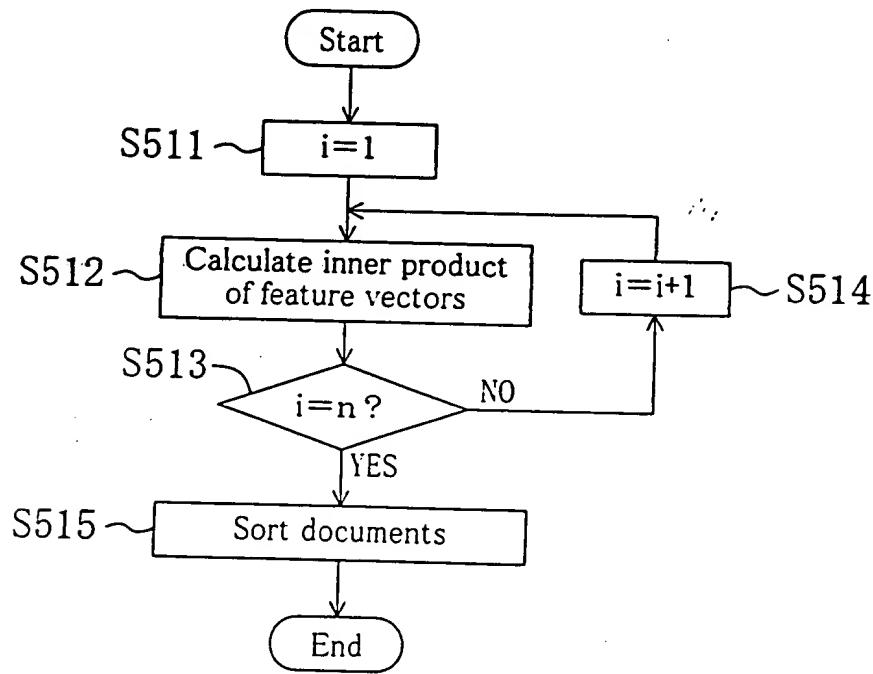


FIG. 22

